

## Message Text

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PAGE 01     PRETOR 01021 221843Z  
ACTION NODS-00

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-----118911 221845Z /41  
O 221735Z FEB 78  
FM AMEMBASSY PRETORIA  
TO SECSTATE WASHDC IMMEDIATE 536

S E C R E T PRETORIA 1021

NODIS

DEPT PLS PASS WHITE HOUSE, USUN, AND MOOSE IN LONDMN;  
BRUSSELS/USEEC FOR AMBASSADOR SMITH

E.O. 11652: XGDS-2  
TAGS: MNUC, PARF, SF  
SUBJECT: US-SOUTH AFRICAN TECHNICAL NUCLEAR TALKS

REF: PRETORIA 1020

1. SUMMARY: TECHNICAL TEAM MF LOCKE, MENZEL,  
AND LEWIS HAD FULL DAY OF MEETINGS FEBRUARY 22 WITH ROUX,  
SENIOR AEB AND UCOR STAFF, AND AMBASSADOR BOTHA OF DFA.  
TEAM HAD AMPLE OPPORTUNITY TO EXPLAIN US TECHNICAL PROPOSALS  
ON SAFARI FUEL AND VALINDABA SAFEGUARDS, AS WELL AS GENERAL  
LUNCHEON DISCUSSION COVERING BROADER TECHNICAL AND  
POLITICAL ASPECTS OF US-SAG NUCLEAR RELATIONS. END SUMMARY.

2. FIRST SESSION, ATTENDED BY ALL PARTICIPANTS, WAS  
DEVOTED TO PRESENTATION AND DISCUSSION ON US  
NUCLEAR PROLIFERATION POLICY AND NEW LEGISLATION. LOCKE  
DREW ON NYE FOREIGN AFFAIRS ARTICLE, DEPARTMENT'S SUMMARY  
OF NEW LEGISLATION; AND ACDA ANALYSIS OF EFFECT OF  
LEGISLATION ON US-SAG AGREEMENT FOR COOPERATION. THERE  
WAS LITTLE REACTION TO PRESENTATION OF POLICY ASPECTS,  
BUT DETAILED AND THOUGHTFUL QUESTIONING ON THE EFFECT

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OF THE LEGISLATION, PARTICULARLY ON HOW THE FULL-SCOPE  
SAFEGUARDS REQUIRED BY THE LEGISLATION COMPARE WITH  
SAFEGUARDS REQUIRED BY THE NPT. SOUTH AFRICANS WERE  
ALSO KEENLY INTERESTED IN NEW LICENSING PROCEDURES  
AS THEY DEVELOP FROM NEW LEGISLATION. TEAM UNDERTOOK TO  
REFER TECHNICAL LEGAL QUESTIONS TO WASHINGTON FOR EXPERT  
RESPONSES, AND TO PROVIDE FINAL COPIES OF LEGISLATION AND

ANY FOLLOW-ON REGULATORY MATERIALS AS THEY BECOME AVAILABLE.

3. LEWIS (ARGONNE LAB) SUBSEQUENTLY MET WITH AEB DEPUTY PRESIDENT HUGO AND OTHERS FOR REVIEW OF SAFARI FUEL PROPOSAL. SOUTH AFRICANS AGREED TO FEASIBILITY OF MEDIUM-ENRICHMENT FUEL (30-40 PERCENT) FOR NEAR-TERM LOADING OF SAFARI AND TO DESIRABILITY AND FEASIBILITY OF A LOW-ENRICHMENT (LESS THAN 20 PERCENT) FUEL DEVELOPMENT PROGRAM AND ITS LONG-TERM APPLICABILITY TO SAFARI. SOUTH AFRICANS ARE ANXIOUS TO COOPERATE AND PARTICIPATE IN BOTH PROGRAMS, BUT RAISED AS A KEY ISSUE THE QUESTION OF INTERIM FUEL SUPPLY FOR SAFARI PENDING AVAILABILITY OF LOWER ENRICHED FUEL. SAFARI NOW HAS FUEL FOR ABOUT ONE AND ONE-HALF MONTHS OF OPERATION AT NORMAL POWER AND DUTY CYCLE (20 MW, 5 DAYS/WEEK). THEY HAVE BEEN OPERATING AT ONE-EIGHTH NORMAL POWER (5 MW, 5 DAYS/WEEK, EVERY OTHER WEEK) SINCE APRIL 1977 TO CONSERVE FUEL. FOR PRACTICAL PURPOSES, HOWEVER, THE REACTOR IS ESSENTIALLY SHUT DOWN WHEN OPERATING AT THIS POWER LEVEL. AT THE CURRENT OPERATING LEVEL THEY WILL EXHAUST FUEL BY ABOUT JANUARY 1979.

4. SAFEGUARDS DISCUSSION COVERED TWO SESSIONS OVER A PERIOD OF THREE TO FOUR HOURS. W.L. GRANT, GENERAL MANAGER OF UCOR, CHAIRED SESSIONS AND ASKED MOST OF THE QUESTIONS. MENZEL REVIEWED PROPOSED SAFEGUARDS PROGRAM FOR VALINDABA AND FIELDED NUMEROUS QUESTIONS DESIGNED TO CLARIFY SAG  
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UNDERSTANDING OF THE PROPOSAL. TECHNICAL DIALOGUE WAS PERTINENT TO THE ISSUE, BUT UCOR PROVIDED NO NEW INFORMATION. A RECENTLY PUBLISHED FIGURE OF 2-3 PERCENT ENRICHMENT RANGE OF VALINDABA PRODUCT (ARTICLE IN PANORAMA, FEBRUARY ISSUE) WAS NEITHER CONFIRMED NOR DENIED. GRANT AGREED WITH MENZEL THAT THE NEXT STEP OF TECHNICAL DISCUSSIONS SHOULD INVOLVE RELEASE OF VALINDABA INFORMATION (E.G., PHYSICAL LAYOUT, MATERIAL FLOW) BUT THAT A POLITICAL DECISION WOULD BE REQUIRED FOLLOWED BY SOME FOUR WEEKS OF GATHERING AND REVIEWING MATERIAL FOR RELEASE. UCOR REPS WERE NON-COMMITTAL ON PROPOSAL, BUT DISPLAYED UNDERCURRENT OF GENERAL AGREEMENT ON THE TECHNICAL APPROACH REPRESENTED BY IT.

5. BEARING OUT FOURIE'S COMMENTS TO THE AMBASSADOR (REFTEL), ROUX MADE IT CLEAR THAT HE WAS INSTRUCTED TO REPORT HIS REACTIONS TO THE PROPOSALS DIRECTLY TO THE POLITICAL LEVEL, AND CONSEQUENTLY WOULD PROBABLY NOT BE ABLE TO PROVIDE EVEN PRELIMINARY REACTIONS TO THE TEAM. TEAM EMPHASIZED THAT ITS PURPOSE WAS TO INSURE THAT SAG HAD SUFFICIENT INFORMATION ON US PROPOSALS TO PERMIT INFORMED DECISIONS ON NPT AND VALINDABA INTERIM SAFEGUARDS, AND EXPRESSED VIEW THAT REACTIONS FROM TECHNICAL LEVEL WOULD BE USEFUL IN FURTHER

REFINING PROPOSALS. ROUX DOUBTED THAT SAG REACTION WOULD BE FORTHCOMING BEFORE CABINET-LEVEL REVIEW, WHICH COULD TAKE SOME TIME IN VIEW OF SAG PREOCCUPATION WITH VARIETY OF ISSUES.

7. ROUX HAS UNDERTAKEN TO CONTACT EMBASSY MORNING OF FEBRUARY 23, POSSIBLY TO ARRANGE A MEETING FOR THE AFTERNOON. WE ARE NOT CERTAIN WHAT TO EXPECT FROM SUCH A MEETING, IN VIEW OF ROUX'S INSTRUCTIONS TO REPORT DIRECTLY TO CAPE TOWN, BUT WE ARE HOPEFUL THAT HE MAY BE ABLE TO OFFER A MORE SUBSTANTIVE REACTION O TEAM PRESENTATIONS THAN WAS OBTAINED TODAY.

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## Message Attributes

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**Capture Date:** 01 jan 1994  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
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**Decaption Date:** 01 jan 1960  
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